XGA and SXGA+ dual lamp rear screen video wall display projectors



# Your partner for high-performance video wall displays

You expect quality. You need an effective solution that works reliably 24/7, no questions asked. For more than 30 years, Christie has been manufacturing high performance rear projection video wall engines and display systems that allow you to maximize your efficiency and response time when monitoring or managing critical real-time information and situations.

Great for video wall upgrades without having to replace the entire system, Christie's rear screen video wall display projectors are the engines that drive high performance video walls. Christie's video wall projectors are purpose-built for 24/7 data monitoring environments and come in a wide range of resolutions and display sizes.







Madrid Airport

◀ Massachusetts Bay Transit Authority

## Benefits of Christie rear projection technology

Purpose-bu	ilt for high performance				
Image	Ultra high contrast, view-ability and display performance				
	DLP® technology for best data and video imaging				
	Comprehensive color adjustment features for exact color matching between projectors				
	Integrated 6 axis adjustment system for precise geometry alignment				
Flexibility	Numerous configuration options depending on resolution and brightness requirements				
	Multiple lens types to support various screen technologies, including large screen sizes				
	Hot swappable automatic lamp changer to minimize interruption upon a lamp failure				
	Specialty color and brightness management features for best matching across multiple displays				
	Built-in edge blending for seamless tiling applications				
	Accommodating display screen sizes ranging from 50" to 120"				
	Extensive and easy-to-use projector control capabilities				
	Constant diaganostic monitoring				
Purpose-bu	ilt for overall low cost of ownership				
Extremely lo	ong life lamps and redundancy feature save time and money				
Extremely h	igh system reliability (MTBF)				
Modular de	sign for minimal downtime if a repair is required				

## Designed for long term use and performance. No need to replace in a few years. The best pro-rated lamp warranties – not only for the original lamps supplied, but also for replacement lamps

Utilizing the best technologies to ensure high reliability and long useful life

MTBF of over 63,000 hours (based on actual field results of earlier lower brightness version)

1-chip DLP® technology offers superior images and long life stability

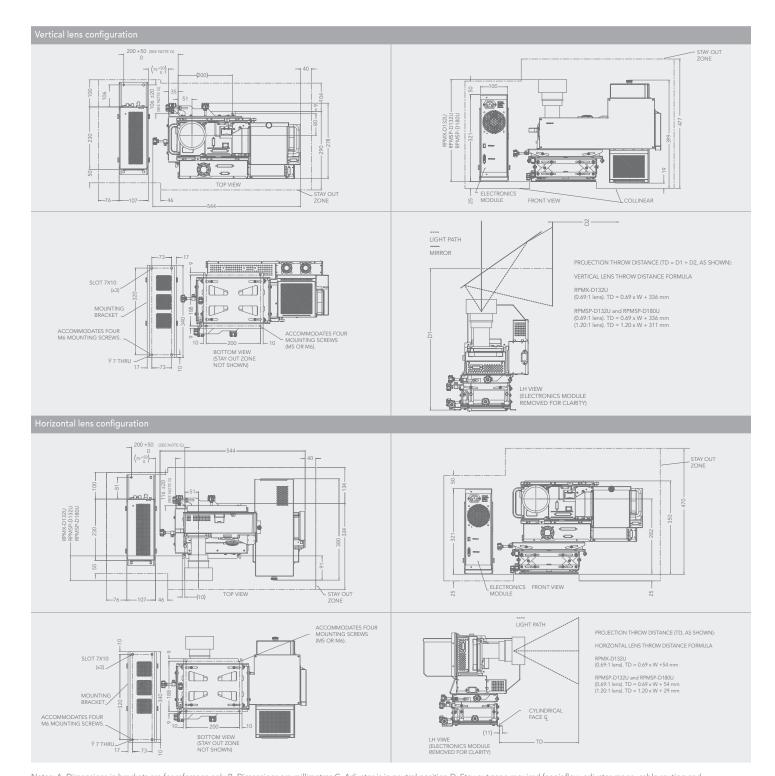
 $\hbox{\tt Dust-free sealed optics protect key optical components from even the smallest particles}$ 

### **Technical specifications**

		RPMX-D132U	RPMSP-D132U	RPMSP-D180U					
Recommended application		Rear projection video walls with screen sizes from 50-70" diagonal, each at XGA resolution	Rear projection video walls with screen sizes from 50-70" diagonal, each at SXGA+ resolution	Larger rear projection video walls with screen sizes from 67-120" diagonal, each at SXGA+ resolution					
Technology	imaging	• 1-chip DLP®, Dark Chip	• 1-chip DLP®, Dark Chip	• 1-chip DLP®, Dark Chip					
	native resolution	• XGA (1024 x 768)	• SXGA+ (1400 × 1050)	• SXGA+ (1400 x 1050)					
	illumination	Dual (redundant) UHP (120/132W)	Dual (redundant) UHP (120/132W)	• Dual (redundant) UHP (160/180W)					
nputs	standard	S-BNC: RGBHV/YPbPr • DVI-I (digital/analog, RGB/YPbPr, HDCP) • Composite video, S-video							
'	scan rates	• Horizontal: 15-120kHz • Vertical: 23.97-150Hz • Pixel clock: 210 MHz							
	expansion	One expansion slot for adding input modules							
	optional modules	• RGB 400 active loop-through input module • Dual SD/HD-SDI input module • DVI input module							
	compatibility	All Christie display wall controllers • Compatible with VGA through to QXGA  • Separate, composite sync and sync-on-green compatible, accepts composite video, S-video (Y/C), component video (YUV) and HDTV (YPbPr)  • Accepts and displays all currently known HDTV formats (1080i, 720p, 576i/p, 480i/p)							
Output display	compatibility	• SXGA+ models can also operate in native SXGA mode							
Color	temperature range	• 3200-9600K							
	processing	• True 10-bit digital color processing • 13-bit color correction							
	adjustment and control	Comprehensive Color Adjustment (CCA™) for true color matching							
Optical	lens types <sup>1</sup>	• 0.69:1 low distortion, zero offset	• 0.69:1 and 1.2:1 low distortion, zero offset						
	screen size range	• 50-100" diagonal (up to 120" diagonal for RPMSP-D180U with 1.2:1 lens)							
	brightness uniformity	• 90%     • Brightness Uniformity Control provides up to 100% uniformity capability for critical applications							
Control/ networking	ports/controls	• 2 RS-232 ports and 1 RS-422 port • Field upgradable software via RS-232 network or Ethernet • IR remote control • GPIO port • On-board ChristieNET™ connectivity (RJ45)							
Upgrade-ability	software	KoRE™ 10-bit librarian communication software for field upgrade of firmware							
Compatibility	cubes and video walls	All models compatible with standard Christie CC50-2301 (50") cubes and CC67-3001 (67") cubes     SXGA+ models compatible with Christie CK series 70", 80", 84" and 100" video wall systems							
Optional	inputs	See optional input modules above							
Accessories	other	Wired remote control • Service manual • Warping module for SXGA+ models							
	retrofit kits	Retrofit kits available for upgrading existing video walls with newer light engines							
Physical	dimensions	See included line drawings							
characteristics	weight (approximate)	• 52lb (23.6kg) • Shipping weight: 60lb (27.2kg)							
Environment	operating temperature <sup>5</sup>	• 5-35°C (40-95°F)	• 5-30°C (40-86°F)						
	non-operating temperature	• -20-50°C (-4-122°F)	• -20-50°C (-4-122°F)						
	humidity	• 20-80% non-condensing							
	altitude	• 0-3000m (0-10,000ft)							
Power requirements	voltage	• 100-240 VAC ±10% @ 50/60Hz	• 100-240 VAC ±10% @ 50/60Hz	• 100-240 VAC ±10% @ 50/60Hz					
	current	• Rating: 2.4A @ 100V, 1A @ 240V	• Rating: 2.4A @ 100V, 1A @ 240V	• Rating: 2.95A @ 100V, 1.21A @ 240V					
	consumption	• 240W	• 240W	• 276W					
	dissipation	• 820 BTU/hr	/hr • 820 BTU/hr • 1025 BTU/hr						
Reliability and serviceability	MTBF	Projector: 63,000 hrs – excluding lamp (calculated based on actual field data of original D120U model using same projection platform)     Color Wheel: air bearing type – 50,000 hrs							
	MTTR	• <15 minutes with modular design • <5 minutes for lamp							
Calibration		• All units are factory calibrated for best color performance • Auto-calibration of lamp occurs upon lamp replacement							
Limited warranty		Limited 2 years parts and labor (excluding lamp) • Lamp – pro-rated for original lamps and all service replacements lamps     Contact an authorized Christie representative for full details of our limited warranty							
Additional featu	res		input sources • Picture-in-Picture capability • Co						

	Operating mode	Brightness (ANSI lumens)	Lamp power	Lamp life³	White boost	Color matching performance	Color wheel <sup>4</sup>	Contrast ratio <sup>2</sup>
RPMX-D132U (XGA)	max bright	• 1100 max., 995 typ	• 132W	• 6000 hrs	• On	• Reduced	• 4 segment	• 2700:1 FF 550:1 ANSI
	eco	• 585 max., 510 typ.	• 120W	• 10,000 hrs	• Off	• Best	(RGBW)	
RPMSP-D132U (SXGA+)	max bright	• 1350 max., 1175 typ.	• 132W	• 6000 hrs	• On	Reduced	• 4 segment (RGBW)	• 2100:1 FF 700:1 ANSI
	eco	• 645 max., 560 typ.	• 120W	• 10,000 hrs	• Off	• Best		
RPMSP-D180U (SXGA+)	max bright	• 1565 max., 1420 typ.	• 180W	• 6000 hrs	• N/A	• Best	• 6 segment (RGBRGB)	• 2200:1 FF 640:1 ANSI
	eco	• 1385 max., 1260 typ.	• 160W	• 7000 hrs	• N/A	• Best		

Nominal lens throw ratio shown. Actual throw distance may be within 5% of nominal value. Contact your Christie representative for details. <sup>2</sup>Maximum contrast ratios are shown. The contrast ratio specified is the "natural" contrast ratio measured by both full field and ANSI methods. Such values are critical for proper contrast performance assessment – especially for video walls and data display walls. These values are not based on utilizing "dynamic" enhancements which are primarily designed for individual video displays whereby brightness may be affected. Contrast ratios and brightness specifications shown are based on the 0.69:1 lens. Small variances may exist with other lens types. <sup>3</sup>For UHP (Mercury) lamps, expected lamp life is based on lamp manufacturer's rating. Typical expectation is that greater than 50% of lamps will reach lamp life rating when operated as specified. <sup>4</sup>The RPMSP-D180U utilizes an exclusive 6 segment color wheel with superior color performance and color matching at maximum brightness settings. The RPMX-D132U and RPMSP-D132U utilize a standard 4 segment tool wheel with a white segment to enable higher brightness. The white segment may be disabled from display use which will enable best color matching ability. <sup>5</sup>For best long term performance and reliability, Christie recommends that all electronic equipment, such as projection systems, to regularly operate at temperatures below 25°C (77°F).



Notes: A. Dimensions in brackets are for reference only B. Dimensions are millimetres C. Adjuster is in neutral position D. Stay out zone required for air flow, adjuster range, cable routing and service E. Projection distance tolerance  $\pm$  1.5% F. The electronics module is shown in nominal position relative to projector's body it can be relocated to the left up to 50, and  $\pm$  20mm back and forth from nominal position

#### Corporate offices

Christie Digital Systems USA, Inc USA – Cypress ph: 714 236 8610

Christie Digital Systems Canada Inc. Canada - Kitchener ph: 519 744 8005

#### Worldwide offices

United Kingdom ph: +44 (0) 118 977 8000 Germany ph: +49 2161 664540

ph: +33 (0) 1 41 21 44 04 Eastern Europe and Russian Federation

ph: +36 (0) 1 47 48 100

United Arab Emirates ph: +971 (0) 4 299 7575

India ph: (080) 41468941 - 48 Singapor ph: +65 6877 8737 China (Shanghai)

ph: +86 21 6278 7708

## China (Beijing) ph: +86 10 6561 0240

Japan (Tokyo) ph: 81 3 3599 7481 Korea (Seoul) ph: +82 2 702 1601

#### Independent sales consultant offices

Spain ph: +34 91 633 9990 Italy ph: +39 (0) 2 9902 1161 South Africa ph: +27 (0) 317 671 347





### For the most current specification information, please visit www.christiedigital.com





